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EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2616

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06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/827,485

Applicant(s)

BRUMM ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28 and 30-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 17 May 2007 have been fully considered but they are not persuasive. On page 5 of the Response, Applicant asserts that

[T]he section [of Applicant's admitted prior art] relied upon by the Office Action fails to teach or suggest the protocol stack configuration where first signaling information is communicated between the communication network and the data processing device through the interface with the assistance of signaling packets of the packet-switched communication network, and the second signaling information is communicated between the communication network and the data processing device through the interface with the assistance of data packets of the packet-switched communication network.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Here, Examiner relied upon Applicant's admitted prior art to teach the protocol stack configuration where first signaling information is communicated between the communication network and the data processing device through the interface with the assistance of signaling packets of the packet-switched communication network (Office Action: p. 3). Examiner relied upon Bressler to teach the protocol stack configuration where second signaling information is communicated between the communication network and the data processing device through the interface with the assistance of data packets of the packet-switched communication network (Office Action: pp. 3-4). Thus, it is the combination of Applicant's admitted prior art and Bressler that teaches the claimed protocol stack configuration, as outlined in the Office Action, mailed 20 February 2007, rather than Applicant's admitted prior art individually.

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2. On page 6 of the Response, Applicant asserts that “[Bressler’s] disclosure does not address terminal devices, but addresses network node communication, which is based on a different telecommunication standard (ANSI T1.111; SS7).” Applicant then asserts that “[t]here is no teaching or suggestion in Bressler that would make the MTP protocol [disclosed by Bressler] applicable for interfacing a terminal device to a communication network.” While Examiner agrees that Bressler’s disclosure does not directly address terminal devices, Examiner respectfully disagrees that Bressler does not provide a teaching or suggestion that would make Bressler’s system applicable to a terminal device in a communication network. Bressler’s disclosure explicitly states that the system is not limited to a particular type of protocol (col. 2, lines 62-64, where other types of protocols may be used, see also col. 2, lines 6-15, where the system is described in the most general of terms, e.g. “first and second type links,” which suggests that the system is compatible with various types of protocols). This suggests that Bressler’s system could be used with various types of protocols and, by extension, various types of devices.

3. In addition, Examiner relies on Applicant’s admitted prior art to provide the teaching for terminal devices (Specification: p. 2, lines 25-29), where “user-channel-related signaling messages [i.e. signaling messages from a terminal] . . . are mapped onto signaling packets” (Specification: p. 2, lines 9-13). Applicant is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Thus, Examiner maintains that while Bressler, individually,

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may not disclose the use of a terminal, the combination of Applicant's admitted prior art and Bressler nonetheless teaches the claimed terminal devices.

4. On page 6 of the Response, Applicant further asserts that since the UDP/TCP packets which encapsulate the SS7 messages in Bressler are processed under an IP stack, Bressler fails to teach processing second signaling for circuit-switched telecommunications under a second protocol stack. Examiner, respectfully, disagrees. Claim 1 merely requires that the system "configur[e] second signaling information according to a standard signaling protocol for circuit-switched telecommunications that is processed under a second protocol stack" and that "the second signaling information [be] communicated . . . with the assistance of data packets of the packet-switched communication network." Here, Bressler teaches that the SS7 messages are processed using an SS7 protocol stack (col. 7, lines 56-58), i.e. configuring second signaling information (SS7 information) according to a standard signaling protocol for circuit-switched telecommunications that is processed under a second protocol stack. Bressler also teaches that the SS7 messages are encapsulated in TCP/IP packets (col. 4, lines 57-60), i.e. communicating the second signaling information with the assistance of data packets of the packet-switched communication network. Thus, while Bressler may disclose that the second protocol stack is not used to process the packets encapsulating the second signaling information, the claims never require that the data packets of the packet-switched communication network be processed under the second protocol stack. Rather, as outlined above, claim 1 only requires that the second signaling information, i.e. the payload of the data packets, be processed according to the second protocol stack. Thus, Examiner maintains that Bressler teaches processing second signaling for circuit-switched telecommunications under a second protocol stack

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5. On page 6 of the Response, Applicant additionally asserts that “there is no apparent reason why one skilled in the art would combine the elements described in the Background with Bressler” since “the ‘reduced cost’ cited in Bressler refers to the fact that SS7 is out-of-band signaling that requires its own separate signaling network.” Examiner, respectfully, disagrees. As outlined in the Office Action, mailed 20 February 2007, the combination of Applicant’s admitted prior art with Bressler “provide[s] telephony clients with telephony features that would not otherwise be available through H.225 signaling in a manner that reduces costs by transmitting such signaling over the already present IP links” (Office Action: p. 4). Thus, the reduction of cost stems from the fact that the additional telephony features can be provided in a manner that does not require additional signaling links to provide the circuit-switched signaling to the terminal. As such, Examiner maintains that one of ordinary skill in the art at the time of the invention would have been motivated to combine the elements described in the Background with Bressler.

6. On page 7 of the Response, Applicant asserts that “Baratz fails to solve the deficiencies of the documents described above.” However, as outline above, Examiner maintains that the documents “described above” are not deficient. Applicant then asserts that “there is no apparent reason why one skilled in the art would combine Baratz with the elements described in the Background and Bressler.” Applicant reasons that Baratz “clearly teaches away from the APA and Bressler” (Response: p. 7) by “teach[ing] that the Novell/PBX protocol is the only telecommunications protocol that is supported by the PC” (Response: p. 7). Examiner, respectfully, disagrees.

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7. Examiner uses Baratz to teach the use of a program module to convert transmitted signaling information into image information to be displayed on a display unit and to process information which is input using an input unit using data exchanged between a module implementing a protocol stack and the display module (Office Action: p. 7). Examiner submits that whether Baratz uses one or two protocol stacks does not bear on the advantages of using Baratz's display module. Simply, Baratz' display module is not designed in a manner that would make it operable in the presence of a single protocol stack but inoperable in the presence of multiple protocol stacks. As such, Examiner maintains that one of ordinary skill in the art would recognize the advantages of Baratz's display module and thus combine the teachings of Baratz with the elements described in the Background and Bressler.

8. In view of the foregoing, Examiner maintains that claims 28 and 30-38 are obvious in view of the cited prior art.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 28, 30-32, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Bressler (USPN 6,584,190), of record.

11. Regarding claims 28 and 37, Applicant discloses as prior art a terminal device (p. 2, lines 25-28) coupled to a packet-switched communication network (p. 2, lines 25-28) comprising: a data processing device having a first program module (p. 2, lines 7-17, where the first program

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module transmits signaling according to the H.225 signaling protocol), wherein said processing device configures first signaling information according to a first standard signaling protocol for packet-switched telecommunications that is processed under a first protocol stack (p. 2, lines 7-17, where the processing device configures first signaling information according to the H.225 protocol stack, wherein H.225 is a standard signaling protocol for packet-switched telecommunications), an interface unit for operatively coupling the terminal device to the packet-switched communication network (p. 2, lines 26-28, where the terminal device is connected to the packet-switched communication network, such that it is implicit that this connection is done by an interface unit) wherein the first signaling information is transmitted through the interface with the assistance of signaling packets of the packet-switched communication network (p. 2, lines 15-17, where the signaling information is transmitted with the assistance of signaling packets).

Applicant does not admit as prior art that the processing device also configures second signaling information according to a standard signaling protocol for circuit-switched telecommunications that is processed under a second protocol stack or that the second signaling information is transmitted through the interface with the assistance of data packets of the packet-switched communication network. However, Applicant does admit as prior art that there are certain services in the circuit-switched network that cannot be supported by H.225 signaling (p. 4, lines 7-9). Bressler teaches, in a system for transmitting telephony control signals at reduced cost (col. 2, lines 1-3, see also col. 2, lines 62-64, where Bressler's system supports any type of telephony control signaling), having a processing device configure second signaling information according to a standard signaling protocol for circuit-switched telecommunications (col. 4, line

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57-col. 5, line 5, where the system configures telephony control signaling used in circuit-switched networks according to SS7, i.e. a standard signaling protocol for circuit-switched telecommunications, see also col. 6, lines 20-38, which details the SS7 protocol stack) and transmitting the second signaling information through an interface with the assistance of data packets of the packet-switched communication network (col. 4, line 57-col. 5, line 5, where the SS7 packets are encapsulated into UDP or TCP packets for transmission over an IP link).

Bressler does this to enable communications of control signaling associated with telephony calls at reduced costs (col. 2, lines 1-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the processing device of Applicant's admitted prior art configure second signaling information according to a standard signaling protocol for circuit-switched telecommunications that is processed under a second protocol stack and to transmit the second signaling information through the interface with the assistance of data packets of the packet-switched communication network to provide telephony clients with telephony features that would not otherwise be available through H.225 signaling in a manner that reduces costs by transmitting such signaling over the already present IP links.

12. Regarding claim 30, Applicant's admitted prior art in view of Bressler discloses that signaling information for at least one service and/or performance feature is transmitted as second signaling information (Applicant: p. 4, lines 7-9, where certain services are not supported by H.225 signaling, and Bressler: col. 4, line 57-col. 5, line 5, where such services are supported by traditional signaling sent over the IP link).

13. Regarding claim 31, Applicant's admitted prior art in view of Bressler discloses that the service feature and/or performance feature includes at least one of call pick up, three way

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conferencing, large scale conferencing, holding, displaying of toll information, a closed user group, call number identification, automatic call back when busy, automatic call back when no response, call barring, call waiting indication and call transfer (Applicant: p. 4, lines 3-9).

14. Regarding claim 32, Applicant's admitted prior art in view of Bressler discloses that the second signaling information, with the assistance of the packet-switched communication network, is transmitted from the terminal device to a second interface unit between the packet-switched communication network and the circuit-switched communication network (Applicant: p. 1, lines 26-28, where the subscriber, i.e. a terminal, is connected to a circuit-switched communication network via a packet-switched communication network, and where it is implicit that the circuit-switched and packet-switched communication networks are connected through an "interface").

15. Regarding claim 36, Applicant's admitted prior art in view of Bressler discloses that the terminal device is configured as a computer system with software and hardware (Bressler: col. 8, lines 28-55).

16. Regarding claim 38, incorporating the rejection of claims 28 and 37, above, Applicant's admitted prior art in view of Bressler teaches each limitation of claim 38, as outlined in the rejection of claims 28 and 37, except communicating the second signaling information through the interface unit as part of signaling packets that do not contain any first signaling information. However, Applicant does admit as prior art using signaling packets to communicate signaling information (p. 2, lines 15-17, where the signaling information is transmitted with the assistance of signaling packets). Bressler teaches communicating second signaling information through the interface unit as part of packets that do not contain any first signaling information (col. 4, line

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57-col. 5, line 5, where the SS7 packets are encapsulated into UDP or TCP packets for transmission over an IP link). Under this interpretation of the prior art, Examiner broadly interprets any packet carrying signaling information to be a “signaling packet.” Therefore, under this interpretation of the prior art, Applicant’s admitted prior art in view of Bressler also discloses communicating the second signaling information through the interface unit as part of signaling packets that do not contain any first signaling information (Bressler: col. 4, line 57-col. 5, line 5, where the SS7 packets are encapsulated into UDP or TCP packets for transmission over an IP link such that the encapsulated SS7 packets are “second signaling information communicated as part of signaling packets that do not contain any first signaling information”).

17. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s admitted prior art in view of Bressler (USPN 6,584,190), of record, as applied to claim 28 above, and further in view of Baratz et al. (USPN 5,742,596), of record.

18. Regarding claim 33, Applicant’s admitted prior art in view of Bressler does not expressly disclose that the data processing system further comprises a second program module that converts the transmitted first and second signaling information into image information to be displayed on a display unit and processes information which is input using an input unit, using data exchanged between the first program module and the second program module. Baratz teaches, in a system for communicating telephony information over a packet-switched network, using a program module to convert transmitted signaling information into image information to be displayed on a display unit (Baratz: Fig. 6) and processing information which is input using an input unit, using data exchanged between a program module that receives the information through a protocol stack and the program module that displays the information (Baratz: col. 10,

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lines 35-46, where the host computer has a device driver which permits a client to interact with applications on the host computer). Baratz does this to permit a client to interact with applications on the host computer (Baratz: col. 10, lines 35-46, where the host computer has a device driver which permits a client to interact with applications on the host computer).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a second program module that converts the transmitted first and second signaling information into image information to be displayed on a display unit and processes information which is input using an input unit, using data exchanged between the first program module and the second program module to permit a client to interact with applications on the host computer.

19. Regarding claim 34, Applicant's admitted prior art in view of Bressler in further view of Baratz does not expressly disclose that the second program module provides a graphical interface; however, Applicant's admitted prior art in view of Bressler does disclose that the host computer has software which permits a client to interact with applications (Baratz: Fig. 6 and col. 10, lines 35-46). Examiner takes official notice that GUIs are well known in the art as a means for permitting a user to interact with software on a computer in a visual manner. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the second program module provide a graphical interface in order to permit a client to interact with software on the host computer in a visual manner.

20. Regarding claim 35, Applicant's admitted prior art in view of Bressler in further view of Baratz does not expressly disclose that a number of possible graphical interfaces are stored in the data processing device, and the user interfaces are optionally switched over by the second

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program module; however, Applicant's admitted prior art in view of Bressler in further view of Baratz does disclose that there are multiple applications on the host computer (Baratz: col. 10, lines 35-46, e.g. phone book and dialer). Examiner takes official notice that it is well known in the art to have each application use a different graphical interface which is customized for the particular application. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a number of possible graphical interfaces stored in the data processing device and to have the user interfaces optically switched over by the second program module in order to permit a user to interact with a particular application using a graphical interface customized for that application.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman
Examiner
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